ITEM 8, English Translation of Amendments under Article 19

I claim:

1. A method for applying paints or varnishes with the aid of an application device in order to apply a color design on surfaces of buildings or public or civil engineering works according to a previously executed implementation of a digital image model into a digital object, which represents the real surface of the object, comprising the steps of

bringing the application device into contact with the surface and moving it arbitrarily on the surface,

continuously measuring the position of the application device by use of a non-contact positioning system or additional motion sensors,

applying paint in accordance with said implementation depending on the position measured,

stopping the application of paint automatically, if the position cannot be determined sufficiently accurate with respect to a predetermined position error acceptance threshold or if paint has already been fully applied at the positions of the paint applying elements.

2. The method according to claim 1, wherein the application device is maintained in contact with the surface by manually pressing it onto the surface or by applying a vacuum between the application device and the surface.

3. The method according to claim 1, wherein the positioning system is based on position measurement methods, which use fix entities in relation to the surface, to measure position information relative to, in particular by applying the methods of distance measurement, angular measurement, telemetry, photometrics or imaging measurement principles.

4. The method according to claim 1, wherein a positioning method is used, which utilizes optoelectronic means to identify position relevant characteristics of the surface in the near range of the application device.

5. The method according to claim 1, wherein motions of the application device are measured to derive position information thereof from, in particular velocity and/or rotational velocity and/or acceleration and/or rotational acceleration.

6. The method according to claim 1, wherein additionally the tilt of the application device within the earth gravity field and/or the orientation of the application device in relation to the earths magnetic field is measured and used for the position measurement.

7. The method according to claim 1, wherein the surface object is recorded by at least one method as described in one of the claims 3 to 6.

8. The method according to claim 1, wherein the distance between the paint applying elements and the surface of the object is adjustable.

9. The method according to claim 1, wherein the application device is moved manually.

10. The method according to claim 1, wherein the application device is moved semi-automatically.

11. The method according to claim 1, wherein the application device is moved automatically.

12. The method according to claim 1, wherein the application device comprises at least one nozzle element, in particular a spraying element.

13. The method according to claim 1, wherein the application device comprises a row or an array of spraying elements.

14. A device according to one of the preceding claims, comprising

a movable application device for applying paints and varnishes,

a position measurement means with respect to said device,

a movement measurement means with respect to said device,

means to adjust the distance between the paint applying device and the surface of the object when brought into contact.

Statement under PCT Article 19:

The wording of Claim 1 has been amended: In the new version it is written in more detail, that the method as described in this application, allows to move the application device **arbitrarily** over the surface, while the device is applying paint. See also claim 2 as an example of an application device, which is operated manually. The path of the movement needs not to be prescribed and may be intuitive. The application of paint at precise positions gets possible by use of a real time position measurement system. By stopping the application of paint automatically in the case of uncertain position information the application of colour by fault is avoided, i.e. the method is working robust with regard to faulty colour application.

The changed claim 1 distinguishes this patent application more clearly from the Patent Application WO 00 48841 A (TIDEMAN JOHN D JR) and the Patent FR 2 601 265 A (CHERUBIN GRILLO VICTOR) cited in the international search report. Both cited applications differ in the fact, that a paint application device is first exactly moved to a **prescribed** position by use of a x/y – positioning frame, and secondly paint is applied by a nozzle. These methods of operation require to install a large x/y – positioning frame on the surface.